

REMARKS

Examiner Nguyen is thanked for withdrawing the final rejections of Claims 1-3, 5, 7-11, 13, 15-18, 20, 22-27 and 29-33. However, Claims 1, 24, 30 and 31 are now rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,270,199, hereinafter *Kimura*; and Claims 1-3, 5, 7-11, 13, 15-18, 20, 22-27 and 29-38 are rejected as being unpatentable over U.S. Patent No. 6,325,492, hereinafter *Koitabashi*, in view of *Kimura*; and Claims 6, 14, 21 and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Koitabashi* in view of *Kimura* and further in view of U.S. Patent No. 5,980,015, hereinafter *Saruta*.

Claims 4, 12 and 19 remain canceled, and Claims 1, 2, 5, 9, 10, 13, 17, 18, 20-25, 27, 30-33, 36 and 38 are canceled by this amendment. Claims 39-41 are newly added by this amendment. Thus, Claims 3, 6-8, 11, 14-16, 26, 28, 29, 34, 35, 37 and 39-41 are currently pending in this application, with Claims 39-41 being independent.

Koitabashi discloses an ink jet recording apparatus that is capable of varying the ejection amount of image forming droplets during successive ejections in multi-value printing modes, but does not disclose smoothing by ejecting both image forming droplets and smoothing droplets from the same nozzle. In column 25, lines 51-55 (emphasis added) *Koitabashi* states that "upon performing smoothing, it is desirable to make the dots to be formed in the smoothing mode by reducing the ejection amount to be ejected through the additional ejection openings than that set for the ejection openings to perform printing."

Kimura discloses a liquid ejecting head and device including a liquid flow path having bubble generation heat elements used to generate bubbles having different

sizes, and a movable mechanism having at least one movable member arranged to face a bubble generation region formed in the liquid flow path. *Kimura* describes in column 5, lines 35-57 that a smoothing operation uses a liquid ejecting head capable of ejecting droplets having different sizes. A liquid flow path supplies an ejection outlet for ejecting the liquid. The liquid flow path has a bubble generating heat means used to eject the liquid, the heat means being capable of selectively generating bubbles having different sizes. At least one movable member faces the bubble generation region formed in the liquid flow path. The movable member guides the bubbles to the ejection outlet so as to supply the droplets having different sizes corresponding to the sizes of the bubbles to a boundary region between an image portion and a non-image portion, thereby performing a smoothing operation.

Claims 39-41 incorporate subject matter previously included in Claims 1 and 9, and are added to better define the claimed subject matter over the cited disclosures. Claims 39-41 are generally directed toward combinations of features including a smoother for performing a smoothing process using the smoothing droplet to form a smoothing dot, wherein the distance between a center of the smaller size smoothing dot and a center of the image forming dot is smaller than the pitch of the image forming dot. Claim 39 further defines a controller for controlling the smoother, thereby maintaining constant the speed of ejection of the ink droplet forming the smoothing dot and changing the timing of ejection of the ink droplet forming the smoothing dot. Claim 40 further defines a controller for controlling the smoother, thereby changing the speed of ejection of the ink droplet forming the smoothing dot in accordance with the size of the ink droplet forming the smoothing dot and changing the timing of ejection of the ink droplet forming the smoothing dot.

Claim 41 further defines a controller for controlling the smoother, thereby changing the speed of ejection of the ink droplet forming the smoothing dot in accordance with the size of the ink droplet forming the smoothing dot and not changing the timing of ejection of the ink droplet forming the smoothing dot.

Nether *Koitabashi* nor *Kimura* disclose controlling the position of a smoothing dot by maintaining/changing the ejection amount of ink droplets, and not changing/changing the timing of ejection of ink droplets, together with the other features defined by Claims 39-41. For at least this reason, Claims 39-41 are allowable.

Claims 3, 6-8, 11, 14-16, 26, 28, 29, 34, 35 and 37 are also allowable at least by virtue of their dependence from allowable independent Claims 39-41, and also because they define features that further define over the cited disclosures. With respect to Claims 6, 14 and 28, the disclosure in *Saruta* does not satisfy the deficiencies of *Koitabashi* and *Kimura*.

Thus, it is requested that all the rejections be withdrawn and that this application be allowed in a timely manner.

In the event that there are any questions concerning this response, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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